

TOWN OF SCITUATE



600 Chief Justice Cushing Hwy  
Scituate, Massachusetts 02066  
Phone: 781-545-8730  
FAX: 781-545-8704

*Planning Board*

September 30, 2015

Ms. Kathleen Curran, Town Clerk  
600 Chief Justice Cushing Highway  
Scituate, MA 02066

**RE: Approval of Site Plan Administrative Review – Scituate Public Safety Complex, 800  
Chief Justice Cushing Highway/Mann Lot Road**

Dear Ms. Curran,

An application for a Site Plan Administrative Review for a new Public Safety Complex was submitted on July 29, 2015. The site plan was entitled Scituate Public Safety, Scituate, MA, Permitting Documents dated July 29, 2015 with revisions through 9/8/2015 by Jennifer Johnson, P.E. of Nitsch Engineering for Dore and Whittier, Inc. and was accompanied by elevations and floor plans by Dore and Whittier, Inc. and Landscape Plans by Radner, Inc. The plans were reviewed for stormwater by the Planning Board's consulting engineer, Joshua Bows of Merrill Associates, Inc.

Three public hearings were held on August 27, 2015, September 10, 2015 and September 24, 2015. Robert Greene was not present at the August 27, 2015 hearing session, but filed a Mullin Rule Certification certifying he had viewed the video of the one session missed. The Health Department, Design Review Committee, Police and Fire Chiefs and the Water Resource Committee all provided comments. The Health Department and DEP are still reviewing the plans, the Design Review Committee reviewed and approved the plans, and both the Police and Fire Chiefs indicated they will avoid the use of Mann Lot Road unless called to it or its adjacent neighborhoods. The Water Resource Committee had concerns about the location of the driveway and parking in the 50 foot buffer zone to wetlands, that storage of petroleum meet the requirements of the Water Resource Protection District (WRPD) and they would need assurance

RECEIVED  
TOWN OF SCITUATE  
TOWN CLERK  
OCT - 1 AM 11:35

that the artificial recharge system will capture rainfall displaced by the amount of impervious surface exceeding 15%, and that the groundwater will not be degraded.

Several abutters expressed concern regarding the project. Jim Hunt of 66 Mann Lot was concerned that the proposed berm was not minimizing cut/fill, was requiring more tree removal than necessary and would divert stormwater to other properties. He also expressed concern over traffic safety and the addition of emergency vehicles to Mann Lot Road as the road is narrow and winding, the adequacy of the stormwater system for the site and the storage of hazardous materials in the WRPD. A letter was received signed by approximately 25 citizens questioning development in the 50 foot wetland buffer zone, reduction of three fire bays to two, the addition of additional traffic flow on Mann Lot Road due to its narrow winding nature, the addition of the berm to the site resulting in more tree removal, additional stormwater flowing to Mann Lot Road and increased construction costs due to the location and the soils on the site.

Three residents expressed concern about adding high speed emergency vehicles to Mann Lot Rd., again citing its narrow and winding nature with poor sight lines and no shoulders. Another concern was the location of ponding and direction of stormwater flow across the site. A couple of residents were concerned about the visibility and design of the septic system, citing problems they had with septic systems nearby. There was some debate as to the usefulness and appearance of the proposed berm behind the complex, which was intended to re-use soil materials and serve as a buffer between the Ellis property and the complex. The Planning Board's consulting engineer, Merrill Associates, found that all stormwater issues were adequately addressed.

At the final public hearing on September 24, 2015, Stephen Pritchard, Chairman, William Limbacher, Robert Vogel, Robert Greene and Ann Burbine being present and voting, the Planning Board voted unanimously to make the following Findings of Fact:

1. The applicant submitted a site plan entitled Scituate Public Safety Scituate, MA, Permitting Documents dated July 29, 2015 with revisions through 9/8/15 by Jennifer Johnson, P.E. of Nitsch Engineering for Dore and Whittier, Architects, Inc.
2. The new Public Safety Complex was supported by a broad spectrum of Town officials, a vote of a Special Town Meeting, and a special election. According to Fire Chief John Murphy, it provides better access to the West End, North Scituate and Minot, in particular, and through the improved access response times for fire engines and ambulances will be significantly reduced. Response times are currently eight minutes for fire engines and 11 minutes for an ambulance to the farthest locations in the West End. These will be reduced to six minutes for both types of vehicles. Other public safety benefits include improved response times for police vehicles, combined dispatch, an Emergency Operations Center and Training Room, and the potential to store both a second ambulance and forest truck for brush fires in a central location in Scituate.
3. A vote of December 3, 2014 Special Town Meeting transferred six acres at Chief Justice Cushing Highway and Mann Lot Road from the custody of the School Committee to the Board of Selectmen. This Special Town Meeting also allocated \$16,200,000 for the design, construction and furnishing of a new Public Safety Complex, to house police, fire and emergency operations. This became effective after a vote of 3,043 in favor, 2,494 opposed, for a Proposition 2 ½ override at a special election on January 10, 2015.
4. The property is vacant land and is located in the Residence R-1 zoning district, the Water Resource Protection District, its Zone II subdistrict and the Wireless Communication Overlay District.
5. According to the elevations and site plan, the average height of the public safety building will be no greater than 35', and the maximum height no greater than 40' to the ridge. It meets the

height requirements for a residential building, and also meets the required front, side and rear setbacks for the Residence district and for the Route 3A setback.

6. The property at 800 Chief Justice Cushing Highway is surrounded on two sides by vacant land owned by the School Committee which is currently open space. A vegetated berm will surround much of the property on these sides. On two other sides, it adjoins Chief Justice Cushing Highway and Mann Lot Rd. The adjoining premises will be protected against any detrimental or offensive uses of the site. The site plan meets the standard of review of Scituate Zoning Bylaw Section 770.6 Paragraph A.

7. The Scituate Zoning Bylaw Section 760.6, Table of Minimum Parking Requirements, requires one parking space for every three occupants as determined by the State Building Code for places of public assembly. The maximum occupancy for the building is 80, with 27 public parking spaces required. 48 are provided including two handicap spaces. 52 secure parking spaces are also provided for police and fire officers and staff with an additional two handicap spaces. Parking appears to be more than sufficient for the proposed use.

Residents have noted that Mann Lot Rd. is a narrow, winding road. According to Figure 4 of the Traffic Assessment by Greenman-Pedersen Inc. (GPI) only 5% of trips to or from the Public Safety Complex will use this road entering or exiting the site. With immediate fire and police access to Route 3A, there are many alternative routes to reach North Scituate. Both the Fire and Police Chiefs have committed to establishing standing policies requiring their respective personnel to avoid the use of Mann Lot Rd. for emergency response unless responding to an emergency on Mann Lot Rd. or the immediately adjacent neighborhoods.

The site plan meets the standard of review of Scituate Zoning Bylaw Section 770.6 B. and C. for traffic safety, ease of access, pedestrian safety, minimizing glare and access for service and emergency vehicles.

8. A septic system on a separate lot is being designed to service the facility. The plans are being reviewed by the Board of Health and will be modified to meet their requirements, inclusive of the requirements of the MADEP. The plans have also been reviewed by the DPW Water Division. The site plan meets the standard of review of Scituate Zoning Bylaw Section 770.6 D. for adequacy of methods of waste disposal, adequacy of water supply and fire-fighting facilities on the site.
9. The site plan and stormwater report were reviewed by the Planning Board's consulting engineer, Josh Bows P.E. of Merrill Associates. The plans were modified in response to his comments. The site is in the Water Resource Protection District and Zone II to a public well. The stormwater system has been designed to improve water quality by reducing total suspended solids by at least 90%, as required by the Zoning Bylaw. The stormwater management system will treat water through two gravel wetlands, a rain garden, a proprietary treatment device and underground infiltration chambers. The applicant is willing to accept conditions to protect groundwater quality related to the storage of salt, chemical de-icing compounds, and petroleum products, and a prohibition on vehicle washing on the site. The site plan meets the standard of Scituate Zoning Bylaw Section 770.6 E. and F. for adequacy of stormwater management and control of toxic and hazardous materials in the Zone II subdistrict and Water Resource Protection District.
10. A vegetated berm has been proposed that will surround much of the property and will partially block the view of the complex and associated activity from the nearby open space. The Conservation Commission has reviewed a Notice of Intent for the project, closed their public hearing on September 16, 2015 and expects to issue Orders of Condition in the very

near future. There will be a pedestrian crossing serving the public parking lot. An erosion and sedimentation control plan will be used and soil will be re-used on the site in the vegetated berm. The site plan meets the standards of Scituate Zoning Bylaw Section 770.6 G., H. and I.

11. The proposed public parking area is adequately buffered and shaded and there is a minimum of one shade tree per ten spaces of a caliper of at least 2 ½ inches dbh. The dumpster is not visible from public ways or from residential areas. Outdoor lighting is no higher than 20 feet tall and is specified to contain cut off fixtures to minimize glare and light spillover. The site plan meets the standards of Scituate Zoning Bylaw Section 770.6 I and J.
12. The site plan entitled Scituate Public Safety Scituate, MA, Permitting Set dated July 29, 2015 with revisions through September 8, 2015 by Jennifer Johnson, P.E. of Nitsch Engineering for Dore and Whittier Architects, Inc. meets the requirements of the Town of Scituate Zoning Bylaw Section 770.6, Site Plan Review Standards of Review to a degree consistent with reasonable use of the site for the purpose permitted by the regulations of the district in which the land is located.

At the final public hearing on September 24, 2015, Stephen Pritchard, Chairman, William Limbacher, Robert Vogel, Robert Greene and Ann Burbine being present and voting, the Planning Board voted unanimously to approve the site plan for the Public Safety Building consisting of Permitting Documents entitled Scituate Public Safety, including all sheets listed on the attachment, stamped and signed by Jennifer L. Johnson, P.E. of Nitsch Engineering for Dore & Whittier Architects, Inc. subject to the following conditions:

1. The project will conform to the approved plans listed above for the Public Safety Building, the stormwater report and a Rendering provided by Stephen Haskell of Dore & Whittier Architects, Inc. to the Planning Board on August 24, 2015, except if bid alternates are approved, the architectural plans, building footprint and driveways may be adjusted for an additional sally port and/or fire truck bay as indicated by dashed lines on the plan. Materials used shall be of the type with the textures shown on the rendering. Any further changes from these plans other than to incorporate the conditions below will require approval of the Planning Board.
2. Materials and details of construction including connection to Town Water shall meet all requirements of the DPW, Board of Health, Fire Department, Conservation Commission, Building Department and Commission on Disabilities. Where this Site Plan Administrative Review requires approval, permitting or licensing from any local, state or federal agency, such required approval, permitting or licensing is deemed a condition of the Town of Scituate Planning Board's approval of this site plan. All necessary permits and approvals must be received prior to construction.
3. The building shall meet all requirements of the Massachusetts state building code.
4. Approval of new curb cuts on Chief Justice Cushing Highway and Mann Lot Rd. must be obtained from the Mass. DOT and the Scituate DPW, respectively.
5. Gasoline, chemical abrasives used for removal of snow and ice on roads, commercial fertilizers, fuel oil and other hazardous materials shall be stored in a Utility Building or other location outside the Water Resource Protection District to the greatest extent possible; all storage shall be in above-ground tanks or containment designed and operated as required by Scituate Zoning Bylaw Section 520.6. No road salt shall be stored on site as required by the Long Term Pollution Prevention Plan.

6. Six reduced sets of 11 x 17 prints and pdf's shall be provided to the Planning Board prior to the pre-construction conference for distribution to Town departments and for the files.

#### **Prior to Scheduling the Pre-Construction Conference**

7. The following items shall be added to the plans prior to scheduling the pre-construction conference:
  - Additional locations for snow storage to provide sufficient room for snow from major storms shall be shown on the plan and approved by the Conservation Commission and DPW.
  - Seed mixes shall be shown on the plans. Only herbaceous plants shall be grown in the raingarden. Prior to planting, 6" of loam shall be added to the berm.
  - Temporary sediment sumps shall be located on the Erosion and Sedimentation Control Plan.
  - Notes shall be added to the plan stating:
    - All construction traffic shall enter the site via Route 3A to the entrance on Mann Lot Road.
    - The lighting in the public parking lot shall be programmable as to on-off and intensity.
    - No vehicles shall be washed on the site.
    - All plantings, vegetation, landscaping and signage along the site frontage shall be kept low to the ground (no more than 3' above street level) or set back sufficiently from Route 3A and Mann Lot Rd. so as not to interfere with available sight lines.
8. Prior to scheduling the pre-construction conference:
  - A check to cover inspections by the consulting engineer shall be provided to the Planning Board office;
  - A schedule and sequence of construction activities shall be provided to the Town Planner;
  - The final Storm Water Pollution Prevention Plan (SWPPP) shall be provided to the Planning Board office.

#### **Construction**

9. A pre-construction conference will be required prior to the start of construction, including a representative of the DPW, the Conservation and Natural Resource Officer, the OPM or his representative, the site contractor and the Town Planner.
10. Any work within the ROW of Mann Lot Road shall be coordinated with the DPW. The DPW shall be notified prior to the start of work within the ROW of Mann Lot Road. Other than as required by this work, there shall be no parking or idling of vehicles on Mann Lot Road during construction.
11. Stormwater control measures shall be maintained according to Long Term Pollution Prevention Plan and Stormwater Operation and Maintenance Plan dated July 29, 2015 submitted for the project and the SWPPP. All clearing and earth moving operations shall only occur while erosion and sedimentation control measures are in place.
12. A crushed stone construction entrance as detailed on the plans shall be required and installed prior to the start of work in any area. Water and sediment shall not be discharged into the

subsurface infiltration areas, gravel wetlands and rain garden until the site is fully stabilized.

13. The Town Planner shall be notified when erosion control measures are in place, when construction begins and when construction is completed. If deemed necessary by the Town Planner in consultation with the DPW Engineering staff and the Conservation and Natural Resource Officer, temporary sedimentation basins, check dams, silt socks and or noise and dust control may be required in addition to the erosion control measures shown on the plan. All erosion control measures shall remain until the Town Planner determines that the danger of erosion or sedimentation no longer exists.
14. Construction shall proceed according to the construction phasing plans.
15. Construction work shall not begin prior to 7 AM weekdays and 8 AM on Saturday and shall cease no later than 7 PM or sunset whichever is earlier. No construction shall take place on Sunday or legal/federal holidays.

**After Construction**

16. A set of As-Built Plans stamped by a registered surveyor and reviewed by the registered professional engineer who designed the system shall be submitted to the Planning Board within 30 days of completion of the work. This plan shall include the construction conditions of the stormwater management system, grading, building and driveways. The As-Built Plan must be submitted prior to obtaining a Certificate of Completion for the Stormwater Permit and such plans must be found in compliance with the approved permit. All grading and landscaping must be complete prior to the as-built submittal.
17. Prior to application for a Certificate of Occupancy, a copy of a contract for inspection and maintenance of stormwater structures per the Long Term Pollution Prevention Plan and Stormwater Operation and Maintenance Plan received September 2, 2015 shall be provided to the Planning Department.
18. If signage identifying the building or providing public information other than for entrance/exit, directions, or safety purposes is incorporated at a later stage of the project's design, it shall be reviewed by the DRC and Planning Board prior to application for a sign permit.

Very truly yours,



Stephen R. Pritchard, Chairman

SRP/LH/kj

cc: Patricia Vinchesi, Town Administrator  
Edward DiSalvio, Chairman, Public Building Commission  
Chief Murphy, Scituate Fire Department  
Chief Stewart, Scituate Police Department  
Donald Walter, Dore and Whittier Architects, Inc.  
Alan Brown, Dore and Whittier Architects, Inc.  
Jennifer L. Johnson, P.E., Nitsch Engineering  
Neil Duggan, Building Commissioner  
Kevin Cafferty, DPW Director  
Jennifer Keefe, Director of Public Health  
Patrick Gallivan, Conservation & Natural Resources Officer  
Planning Board

## PLAN SHEETS and SUBMISSIONS – PUBLIC SAFETY BUILDING

### Plans:

<b>C0.00</b> 'Notes Abbreviations and Legend' : Site Plan Submission–	7/29/15
<b>C1.00</b> 'Site Layout and Materials Plan I' : Site Plan Submission–	7/29/15**
<b>C1.01</b> 'Site Layout and Materials Plan II' : Site Plan Submission–	7/29/15**
<b>C1.02</b> 'Layout and Materials Summary Tables' : Site Plan Submission–	7/29/15
<b>C2.00</b> 'Site Grading and Drainage Plan I' : 2 <sup>nd</sup> Peer Review Response -	9/8/15
<b>C2.01</b> 'Site Grading and Drainage Plan II' : 2 <sup>nd</sup> Peer Review Response -	9/8/15
<b>C3.00</b> 'Site Utility Plan I' : 1 <sup>st</sup> Peer Review Response–	8/25/15
<b>C3.01</b> 'Site Utility Plan II' :– 1 <sup>st</sup> Peer Review Response–	8/25/15
<b>C4.00</b> 'Title 5 Plans' : Site Plan Submission–	7/29/15
<b>C4.01</b> 'Title 5 System Profile' : Site Plan Submission–	7/29/15
<b>C4.02</b> 'Title 5 Details' : Site Plan Submission–	7/29/15
<b>C5.00</b> 'Erosion and Sediment Control Plan I' : Site Plan Submission–	7/29/15
<b>C5.01</b> 'Erosion and Sediment Control Plan II' : Site Plan Submission–	7/29/15
<b>C5.02</b> '"" "" "" Notes and Details' : Site Plan Submission–	7/29/15
<b>C5.03</b> 'Erosion and Sediment Control Details' : Site Plan Submission–	7/29/15
<b>C6.00</b> 'Site Details Sheet I':– Site Plan Submission–	7/29/15
<b>C6.01</b> 'Site Details Sheet II':– Site Plan Submission–	7/29/15
<b>C6.02</b> 'Site Details Sheet III':– 1 <sup>st</sup> Peer Review Response–	8/25/15
<b>C6.03</b> 'Site Details Sheet IV':– 1 <sup>st</sup> Peer Review Response–	8/25/15
<b>C6.04</b> 'Site Details Sheet V' : 2 <sup>nd</sup> Peer Review Response -	9/8/15
<b>C6.05</b> 'Site Details Sheet VI':– 1 <sup>st</sup> Peer Review Response–	8/25/15

*\*\*Plans from the Site Plan Submission (7/29) and 1<sup>st</sup> Peer Review Response (8/25) do not reflect the revised driveway layout in the wetland buffer zone. See C2.00 and C2.01 for revised layout.*

### Figures:

<b>DR-PR</b> 'Proposed Drainage Area Map : 2 <sup>nd</sup> Peer Review Response -	9/8/15
<b>DR-EX</b> 'Existing Drainage Area Map : Site Plan Submission–	7/29/15
<b>Figure 1S</b> 'Existing Drainage Area – Mann Lot Parcel' : 2 <sup>nd</sup> Peer Review Response -	9/8/15
<b>Figure 2S</b> 'Proposed Drainage Area – Mann Lot Parcel' : 2 <sup>nd</sup> Peer Review Response -	9/8/15

### Reports:

<b>HydroCAD</b> 'Existing Mann Lot Parcel' : 2 <sup>nd</sup> Peer Review Response -	9/8/15
<b>HydroCAD</b> 'Proposed Mann Lot Parcel' : 2 <sup>nd</sup> Peer Review Response -	9/8/15
<b>HydroCAD</b> 'Existing' : 1 <sup>st</sup> Peer Review Response–	8/25/15
<b>HydroCAD</b> 'Proposed' : 2 <sup>nd</sup> Peer Review Response -	9/8/15



# LONG-TERM POLLUTION PREVENTION PLAN AND STORMWATER OPERATION AND MAINTENANCE PLAN

Scituate Public Safety, Scituate, MA

## TABLE OF CONTENTS

<b>1.0</b>	<b>LONG-TERM POLLUTION PREVENTION PLAN</b>	<b>3</b>
1.1	Source Control Practices for Pollution Prevention	3
1.2	Storage of Hazardous Materials	3
1.3	Storage of Waste Products	3
1.4	Spill Prevention and Response	3
1.5	Minimize Soil Erosion	3
1.6	Maintenance of Lawns, Gardens, and other Landscaped Areas	4
1.7	Management of Deicing Chemicals and Snow	4
1.8	Coordination with other Permits and Requirements	4
<b>2.0</b>	<b>STORMWATER MANAGEMENT SYSTEM OPERATION AND MAINTENANCE PLAN</b>	<b>5</b>
2.1	Introduction	5
2.2	Stormwater Operation and Maintenance Requirements	5
	Deep Sump and Hooded Catch Basins	5
	Area Drains	5
	Water Quality Unit (Proprietary Separator)	6
	Rain Garden	6
	Subsurface Infiltration Structures	6
	Gravel Wetlands	6
	Stormwater Outfalls	8
	Level Spreaders	8
2.3	Street Sweeping	8
2.4	Repair of the Stormwater Management System	8
2.5	Reporting	8
	<b>STORMWATER MANAGEMENT SYSTEM INSPECTION FORM</b>	<b>9</b>

## **INTRODUCTION**

The purpose of this document is to specify the pollution prevention measures and stormwater management system operation and maintenance for Scituate Public Safety. The Owner shall implement the management practices outlined in this Manual and proactively conduct operations at the project site in an environmentally responsible manner. Compliance with this Manual does not in any way dismiss the Owner, property manager, or occupants from compliance with other applicable Federal, State or local laws.

Owner: Town of Scituate

This Document has been prepared in compliance with Standards 4 and 9 of the 2008 Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards, which state:

### **Standard 4:**

The Long Term Pollution Prevention Plan shall include the proper procedures for the following:

- Good housekeeping
- Storing materials and waste products inside or under cover
- Vehicle washing
- Routine inspections of stormwater best management practices
- Spill prevention and response
- Maintenance of lawns, gardens, and other landscaped areas
- Pet waste management
- Operation and management of septic systems
- Proper management of deicing chemicals and snow

### **Standard 9:**

The Long-Term Operation and Maintenance Plan shall at a minimum include:

- Stormwater management system(s) owner(s)
- The party or parties responsible for operation and maintenance, including how future property owners shall be notified of the presence of the stormwater management system and the requirement for operation and maintenance
- The routine and non-routine maintenance tasks to be undertaken after construction is complete and a schedule for implementing those tasks
- A plan that is drawn to scale and shows the location of all stormwater BMPs in each treatment train along with the discharge point
- A description of public safety features
- An estimated operations and maintenance budget

## **1.0 LONG-TERM POLLUTION PREVENTION PLAN**

---

### **1.1 Source Control Practices for Pollution Prevention**

The Owner and occupants should follow good housekeeping procedures at the project site to reduce the possibility of accidental releases and to reduce safety hazards, which shall include but not be limited to the following:

- Proper handling, storage, disposal, and recycling of hazardous materials and waste products
- Proper handling, storage and inventory of household chemicals
- Prompt cleanup and removal of spills and releases

### **1.2 Storage of Hazardous Materials**

To prevent leaks and spills, keep hazardous materials and waste products under cover or inside. Use drip pans or spill containment systems to prevent chemicals from entering the drainage system. Inspect storage areas for materials and waste products at least once per year to determine amount and type of the material on site, and if the material requires disposal.

Securely store liquid petroleum products and other liquid chemicals in federally- and state-approved containers. Restrict access to maintenance personnel and administrators.

### **1.3 Storage of Waste Products**

Collect and store all waste materials in securely lidded dumpster(s) or other secure containers as applicable to the material. Keep dumpster lids closed and the areas around them clean. Do not fill the dumpsters with liquid waste or hose them out. Sweep areas around the dumpster regularly and put the debris in the garbage, instead of sweeping or hosing it into the parking lot. Legally dispose of collected waste on a regular basis.

Segregate liquid wastes, including motor oil, antifreeze, solvents, and lubricants, from solid waste and recycle through hazardous waste disposal companies, whenever possible. Separate oil filters, batteries, tires, and metal filings from grinding and polishing metal parts from common trash items and recycle. These items are not trash and are illegal to dump. Contact a hazardous waste hauler for proper disposal to a hazardous waste collection center.

### **1.4 Spill Prevention and Response**

The Owner shall implement spill response procedures for releases of significant materials such as fuels, oils, or chemical materials onto the ground or other area that could reasonably be expected to discharge to surface or groundwater:

- For minor spills, keep fifty (50) gallon spill control kits and Speedy Dry at all shop and work areas.
- Immediately contact applicable Federal, State, and local agencies for reportable quantities as required by law.
- Immediately perform applicable containment and cleanup procedures following a spill release.
- Promptly remove and dispose of all material collected during the response in accordance with Federal, State and local requirements. A licensed emergency response contractor may be required to assist in cleanup of releases depending on the amount of the release, and the ability of the Contractor to perform the required response.
- Reportable quantities of chemicals, fuels, or oils are established under the Clean Water Act and enforced through Massachusetts Department of Environmental Protection (DEP).

### **1.5 Minimize Soil Erosion**

Soil erosion facilitates mechanical transport of nutrients, pathogens, and organic matter to surface water bodies. Repair all areas where erosion is occurring throughout the project site. Stabilize bare

soil with riprap, seed, mulch, or vegetation.

#### **1.6 Maintenance of Lawns, Gardens, and other Landscaped Areas**

As required by the Town of Scituate, storage of fertilizers and/or animal manure will be provided in covered and/or contained structures designed to prevent the generation and escape of contaminated runoff or leachate.

#### **1.7 Management of Deicing Chemicals and Snow**

The qualified contractor selected for snow plowing and deicing shall be made fully aware of the requirements of this section.

No road salt (sodium chloride) shall be stored on-site. The use of magnesium chloride de-icing product with a 0.5 to 1.0 percent sodium chloride mix for snow and ice treatment is permitted. The product shall be stored in a locked room inside the building and shall be used at exterior stairs and walkways. The snow plow contractor shall adhere to these magnesium chloride use and storage requirements.

During typical snow plowing operations, snow shall be pushed to the designated snow removal areas noted on the Layout and Materials Plan. Snow shall not be stockpiled in wetland resource areas or the 100-foot Buffer Zone, catch basins, gravel wetlands, or rain garden. In severe conditions where snow cannot be stockpiled on site, the snow shall be removed from the site and properly disposed of in accordance with DEP Guideline BRP601-01.

Before winter begins, the property owner and the contractor shall review snow plowing, deicing, and stockpiling procedures. Areas designated for stockpiling should be cleaned of any debris. Street and parking lot sweeping should be followed in accordance with the Operation and Maintenance Plan.

#### **1.8 Coordination with other Permits and Requirements**

Certain conditions of other approvals affecting the long term management of the property shall be considered part of this Long Term Pollution Prevention Plan. The Owner shall become familiar with those documents and comply with the guidelines set forth in those documents.

## **2.0 STORMWATER MANAGEMENT SYSTEM OPERATION AND MAINTENANCE PLAN**

### **2.1 Introduction**

This Operation and Maintenance Plan (O&M Plan) for Scituate Public Safety site is required under Standard 9 of the 2008 MassDEP Stormwater Handbook to provide best management practices for implementing maintenance activities for the stormwater management system in a manner that minimizes impacts to wetland resource areas.

The Owner shall implement this O&M Plan and proactively conduct operations at the site in an environmentally responsible manner. Compliance with this O&M Plan does not in any way dismiss the Owner from compliance with other applicable Federal, State or local laws.

Routine maintenance during construction and post-development phases of the project, as defined in the Operation and Maintenance Plan, shall be permitted without amendment to the Order of Conditions. A continuing condition in the Certificate of Compliance shall ensure that maintenance can be performed without triggering further filings under the Wetlands Protection Act.

All stormwater best management practices (BMPs) shall be operated and maintained in accordance with the design plans and the Operation and Maintenance Plan approved by the issuing authority. The Owner shall:

- a. Maintain an operation and maintenance log for the last three years, including inspections, repairs, replacement and disposal (for disposal the log shall indicate the type of material and the disposal location). This is a rolling log in which the responsible party records all operation and maintenance activities for the past three years.
- b. Make this log available to MassDEP and the Conservation Commission upon request; and
- c. Allow members and agents of the MassDEP and the Conservation Commission to enter and inspect the premises to evaluate and ensure that the Owner complies with the Operation and Maintenance requirements for each BMP.

### **2.2 Stormwater Operation and Maintenance Requirements**

Inspect and maintain the stormwater management system as directed below. Repairs to any component of the system shall be made as soon as possible to prevent any potential pollutants from entering the resource areas.

#### Deep Sump and Hooded Catch Basins

Inspect catch basins four times per year, including after the foliage season. Other inspection and maintenance requirements include:

- Remove organic material, sediment and hydrocarbons four times per year or whenever the depth of deposits is greater than or equal to one half the depth from the bottom of the invert of the lowest pipe in the basin.
- Always clean out catch basins after street sweeping. If any evidence of hydrocarbons is found during inspection, the material immediately remove using absorbent pads or other suitable measures and dispose of legally. Remove other accumulated debris as necessary.
- Transport and disposal of accumulated sediment off-site shall be in accordance with applicable local, state and federal guidelines and regulations.

#### Area Drains

Inspect area drains at least once per month and remove debris from the grate. Clean out accumulated sediments at least once per year and more frequently as necessary.

### Water Quality Unit (Proprietary Separator)

Maintain water quality unit according the recommendations set forth by the manufacturer. General inspection and maintenance procedures for proprietary devices are provided below:

- Inspect unit following completion of construction, prior to being put into service.
- Inspect unit at least twice per year following installation and no less than once per year thereafter.
- Inspect unit immediately after any oil, fuel or chemical spill.
- All inspections shall include checking the oil level and sediment depth in the unit. Removal of sediments/oils shall occur per manufacturer recommendations.
- A licensed waste management company shall remove captured petroleum waste products from any oil, chemical or fuel spills and dispose.
- OSHA confined space entry protocols shall be followed if entry into the unit is required.

### Rain Garden

Perform annual maintenance of all components of the rain garden, including plants, soil, and mulch. Table 1, below, outlines recommended maintenance activities.

**Table 1. Rain garden area maintenance recommendations**

<b>Location</b>	<b>Description</b>	<b>Frequency</b>	<b>Time of Year</b>
Surface	Inspect and remove trash	Monthly	Year round
Soil	Inspect and repair erosion	Monthly	Year round
Organic Layer	Remulch void areas	Annually	Spring
	Remove previous mulch layer before applying new layer (optional)	Annually	Spring
Plants	Water vegetation at end of day for 14 consecutive days after planting	Immediately after planting	As needed
	Remove and replace all dead and diseased vegetation that cannot be treated	Annually	Spring
	Treat all diseased trees and shrubs	As needed	Variable

During and after storm events, record the length of time standing water remains in the rain garden area. If the time is greater than 72 hours, thoroughly inspect the basin for signs of clogging and develop a corrective action plan. The corrective action plan, prepared by a qualified professional, will outline procedures to restore infiltrative function. The owner of the site shall take immediate action to implement these corrective measures.

### Subsurface Infiltration Structures

Inspect subsurface infiltration structures twice per year. Inspect the inlets and observation ports to determine if there is accumulated sediment within the system. Remove all debris and accumulated sediment that may clog the system.

### Gravel Wetlands

Maintenance is critical for the proper operation of subsurface gravel wetland systems. There are two separate inspection schedules for the gravel wetlands: (1) First Year Post-Construction, and (2) Post-Construction Routine Monitoring. First Year Post-Construction monitoring differs primarily by its increased frequency to assure proper vegetative establishment and system functioning.

#### First Year Post-Construction

- Inspect the gravel wetlands after every major storm (>2.5 inches in 24 hours) in the first year following construction.
- Monitor the gravel wetland to observe that the system drains within 24-72 hrs (within the design period, but also not so quickly as to minimize stormwater treatment).
- Water plants as necessary during the first growing season.
- Re-vegetate poorly established areas as necessary.
- Treat diseased vegetation as necessary.
- Inspect soil and repair eroded areas, especially on slopes.
- Inspect inlets, outlets, and overflow spillway for blockage, structural integrity, and evidence of erosion.

#### Post-Construction Routine Monitoring

- Inspection frequency should be at least every 6 months after the first year post-construction. Inspection frequency can be reduced to annual following 2 years of monitoring that indicates the rate of sediment accumulation is less than the cleaning criteria listed below.
- Inspect the filter surface for dense, complete, root mat establishment across the wetland surface. Thorough revegetation with grasses, forbs, and shrubs is necessary.
- Inspect the gravel wetland surface for standing water or other evidence of riser clogging, such as discolored or accumulated sediments.
- Inspect the sediment forebay for sediment accumulation, trash, and debris.
- Monitor the sediment forebay to observe if it drains within 24 to 72 hrs.
- Inspect inlets, outlets, and overflow spillway for blockage, structural integrity, and evidence of erosion.
- Remove decaying vegetation, litter, and debris.

#### Cleaning Criteria for Sediment Forebay

- Remove sediment from the forebay when it accumulates to a depth of more than 12 inches (30 cm). Materials can be removed with heavy construction equipment; however this equipment should sediments should be dewatered (if necessary) and disposed of in an acceptable manner.
- Remove vegetation from the forebay if persistent standing water and wetland vegetation becomes dominant.
- The forebay and treatment cell outlet devices should be cleaned when drawdown times exceed 60 to 72 hours.

#### Cleaning Criteria for Gravel Wetland Treatment Cells

- Sediment should be removed from the gravel wetland surface when it accumulates to a depth of several inches (>10 cm) across the wetland surface.
- Materials should be removed with rakes rather than heavy construction equipment to avoid compaction of the gravel wetland surface.
- Heavy equipment could be used if the system is designed with dimensions that allow equipment to be located outside the gravel wetland, while a backhoe shovel reaches inside the gravel wetland to remove sediment. Removed sediments should be dewatered (if necessary) and disposed of in an acceptable manner.

#### Draining and Flushing Gravel Wetland Treatment Cells

- For maintenance it may be necessary to drain or flush the treatment cells. The optional drains will permit simpler maintenance of the system if needed.
- The drains need to be closed during standard operation. Flushing of the risers and horizontal subdrains is most effective with the entire system drained. Flushed water and sediment should be collected and properly disposed.

### Stormwater Outfalls

Inspect flared end sections and associated riprap spillways at least once per year and after major storm events (rainfall totals greater than 2.5 inches in 24 hours) to ensure that the stability of the outlet area is maintained. Keep the outfall area clear of debris such as trash, branches, and sediment. Make repairs immediately if riprap displacement or downstream channel scour is observed.

### Level Spreaders

Inspect level spreaders regularly, especially after major storm events (rainfall totals greater than 2.5 inches in 24 hours). Repair any erosion or low spots in the level spreader.

### **2.3 Street Sweeping**

Perform street sweeping at least twice per year, whenever there is significant debris present on roads and parking lots. Street sweeping shall occur in the spring and fall. Sweepings must be handled and disposed of properly according to the Scituate Conservation Commission.

### **2.4 Repair of the Stormwater Management System**

The stormwater management system shall be maintained. The repair of any component of the system shall be made as soon as possible to prevent any potential pollutants including silt from entering the resource areas or the existing closed drainage system.

### **2.5 Reporting**

The Owner shall maintain a record of drainage system inspections and maintenance (per this Plan) and submit a yearly report to the Scituate Conservation Commission.

**STORMWATER MANAGEMENT SYSTEM INSPECTION FORM**

<b>Scituate Public Safety</b> <b>Scituate, MA</b>		Inspected by: _____ Date: _____
Component	Status/Inspection	Action Taken
Deep Sump Catch Basins, Area Drains and Drain Manholes		
Rain Garden		
Subsurface Infiltration System		
Water Quality Unit		
Gravel Wetlands		
Stormwater Outfalls & Level Spreaders		
General site conditions – evidence of erosion, etc.		

**SUBMIT COPIES OF STORMWATER MANAGEMENT SYSTEM INSPECTION FORM TO THE  
SCITUATE CONSERVATION COMMISSION WITH THE YEARLY REPORT.**

